THE ETHICAL IMPLICATIONS OF DIGITISATION OF THE ALAN PATON CENTRE STRUGGLE ARCHIVES

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Abstract

The fluid development of technology has led to the re-ontologising of systems and the need for archivists and manuscript librarians to change the ways in which they carry out their duties by adapting trends, which include digitisation. This entails professionals changing the way they accomplish their traditional practised values, inclusive of new ethical challenges. This article examines the ethical implications of the digitisation of archival records in a special collection creating new formats of records. In Africa, a number of such projects fail due to lack of proper strategies and planning, unethical practices, lack of harmonised guidelines, frameworks and standards. The intricacies of the digitisation of special records need archivists to assess what they do and the consequences of their actions in order to protect the integrity and authenticity of the record as well as to provide access to it and ensure its preservation. A mixed method approach was used to investigate this case study. Three members of staff working on the digitisation project were interviewed and an observation checklist was also used to examine 114 records that had been digitised. The study revealed that the fundamental ethical challenge emanated from legislation not catering for the governing of private archives in South Africa. In addition, the study also revealed that the archive had only a draft digitisation policy for the current and continued preservation of and access to these records now and in the future. The project lacks clear direction.

Keywords: ethics; digitisation; archives; South Africa; Alan Paton archives

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Introduction

Information communication technologies (ICTs) have begun to re-ontologise systems as the economies of developed countries are dependent on information-based intangible assets, namely digitised records, amongst other factors (Floridi 2010:4). Digitisation is the process of converting analogue records into digital form for electronic access (using ICTs) on site or remotely (Millar 2010:199). Today, digitisation is considered as a remedy and a responsible act of the archivist's strategy for the preservation of and greater access to records made possible by the development of technology and a globalised economy. As a preservation strategy, digital preservation involves processes and actions that will help to ensure continued and indefinite access to information and records that exist in a digital format even when the digital files are taken out of their creation context (Van der Merwe & Van Deventer 2009). As a result of the digitisation of the original paper, a record does not have to be used or handled constantly and this decreases attrition.

Modern technology has changed how access is controlled. Traditionally, users of archives generally requested for information using a form giving the manuscript librarian or archivists legitimate reasons for the need to use the various records. They are an enabling technology and they make the application of new strategies possible and change the old practices and discourses, relations and experiences in fundamental ways (Floridi 2010:60). However, digitisation has brought forth changes thus creating new practices, formats, policy and services creating new professional archival values and raising different ethical challenges. ICTs are changing rapidly with an unprecedented scope making the creation, management, and use of information, communication and computational resources vital issues (Floridi 2010:6; Department of Arts and Culture 2010:21-23; Capurro 2017:277). Although with the continual development of technologies, there are new practices emerging, legislation, policies, strategies and the archival professional practice, especially in the developing countries, are still not at par with the technology. In addition, according to Britz and Lor (2004:216), "access to digitised records and preservation in the longer term may be problematic especially regarding technical as well as ethical issues". This study looks at the critical ethical issues through the lens of a combination of technical and managerial matters.

It, therefore, goes beyond the surface issues to look at the ethics associated with the digitisation of archives. "Archives represent temples of knowledge, veneration, and authority; prisons of control and security; and service centers engaged in mediation and interpretation" (Jimerson 2010:345). Traditional archival records are of no use if they are just preserved and kept in the archival repositories and this has moral and legal concerns (Erway 2012:297). Statements of codes of ethics affirm this in that archivists should ensure the continuing accessibility of records. The

International Council on Archives (2012) affirm this and state, "Archivists should ensure the continuing accessibility and intelligibility of archival materials".

Contextual setting and analysis

With the demise of the South African international author and struggle activist Alan Paton (founder of the Liberal Party) in 1988, his wife, Anne, donated a collection of records and study contents to the University of Natal (Koopman 2010:121). Anecdotal evidence indicates that the donation was based on the friendship between the Late Alan Paton and Professor Colin Webb, the then vice-principal of the University of Natal. The Alan Paton Centre was opened on 24 April 1989 as a branch of the University of Natal campus library. The branch was initially an instrument for supporting the struggle to improve human relations, according to Professor Colin Webb (Alan Paton Centre 1997). This centre for the study of literature and politics holds important and uniquely South African manuscripts and records on various aspects of resistance to apartheid. These resources of enduring value are of interest to researchers and scholars were not deposited according to legislation at the National or Provincial Archive possibly due to the political situation during that time. The centre is visited by both local and foreign researchers and historians (Alan Paton Centre 1997). Visitors had to physically visit the centre to access the important, unique records and could only have limited access to the resources using online finding aids to a few records of the collections via email, excluding various people.

With the merger of the former Universities of Durban-Westville and Natal in 2004 the new institution, the University of KwaZulu-Natal (UKZN), embarked on strategies to support the university's many campuses (five campuses) based in two geographic locations of Durban and Pietermaritzburg. The merger brought about changes in the strategies and visions of the multi-campus university, including plans to support teaching and learning, and develop and expand research and community engagement (University of KwaZulu-Natal 2007). This included the four branch libraries with a variety of unique, rare and valuable collections, namely the Alan Paton Centre and Struggle Archives, Campbell collection, Gandhi-Luthuli Documentation Centre, Centre for African Literacy, which became the special collections. In order to adhere to the university's mission and vision to support teaching, learning, and research to enhance access to the different campuses, the UKZN library embarked on a programme to develop a digital collection (University of KwaZulu-Natal 2009). In 2009, the university purchased electronic journals, creating a repository for electronic and digitised doctoral and master's dissertations and embarked on an in-house digitisation programme for some of the unique and rare records of the special collections. These digital initiatives enabled more accessibility of the collections for the benefit of the multi-campus university and

the global community. However, on the other hand, digitisation of the records could have created exclusion for others in society.

Statement of the problem

The Alan Paton Centre and Struggle Archives is a special collection that contains a variety of resources, including primary sources (records), secondary sources (books) and artefacts. The assorted collections are of historical and political value and prestige to South Africa and the international community, and by digitising the collections, the centre's research potential could expand thus making it widely and easily accessible to users. The digitisation of records could contribute to research and the creation of new knowledge, supporting teaching and learning as well as nurturing the development of critical thinking skills (Britz & Lor 2012:2158; Earwy 2012:298; Capurro 2017:279). However, digitisation changes the format of the records and the manner in which archivists implement their traditional duties (practice and policy), including preservation and provision of access to the records. The lack of proper strategies and processes undertaken to do in-house digitisation and store records affects the integrity and authenticity of the records. Yet, the archivist needs to protect the records at all times, including during the digitisation process and throughout preservation and use. In addition:
Given the open and free access to huge amounts of information, disintermediation is a real threat that puts the authenticity, accuracy, and veracity of digital documents under suspicion. Therefore, some concepts, such as access to trustworthy information, provenance, and unbroken custody, should be revisited (Moreno et al 2014:5; Manžuch 2017:9).

Therefore, in the South African context, archivists' duties are changing with little guidance from professional attestation, thus creating a variety of ethical issues and concerns as a result of ICTs (Department of Arts and Culture 2010:21-23). Technologies such as search engines are taking over some of the work traditionally performed by archivists who are the providers of access to manuscripts and archival records (Asogwa 2011; Moreno et al 2014:4; Bastian 2014:112; Manžuch 2017:1). The challenge that such novel developments pose to the keepers is that they have always taken care of mainly primary tangible records, but now they have to deal with a combination of records, including intangible ones. Yet, the fundamental principles of information ethics state that entropy should be prevented or removed from the infosphere and the entities, as well as the whole sphere of information, should be promoted by preserving, maintaining and enriching their properties (Floridi 2010:92).

The issues facing the profession, especially in the third world, are multifaceted, including that of proper digital processing (using relatively cheap equipment) with technological obsolescence, authenticity and the integrity of records; equitable

access; copyright and security; together with a lack of proper training and the need to understand and ethically apply the professional principles to the archiving of electronic copies of records (Department of Arts and Culture 2010:21-23; Garaba, Stilwell & Ngulube 2011:45-47; Garaba 2014:3). In Africa, a number of such projects have failed because they relied on frameworks that were adapted from the developed countries (Thurston 2012). There is lack of confidence in using local statutory frameworks since they are deemed to have weaknesses. Yet the frameworks from developed countries do not necessarily suit the African context. There is also a need to fully understand each phase of the life cycle of a digital record to ensure continuity and retrievability. In addition: Storage of soft copy must also receive attention – migration from application to application is not as simple as it may sound, as loss occurs and, if left to automatic systems, items are often just dropped from the system if the new application does not 'talk' to the old one – and who has time to check daily whether all the records on the system yesterday are still there today? (Conradie 2012:94). Still, part of an archivist's job is to protect the record and guarantee it is a true representation of the paper record and trustworthy evidence of the past.

The placement of a document or image on the internet qualifies it as published and the easiest way to avoid copyright complications is to add a watermark (Millar 2010:201). How does an archivist behave ethically by balancing access and intellectual property rights? "The watermark does not prevent others from reproducing copyrighted materials without permission but does limit the opportunities for further use by interfering with the aesthetics of the image" (Millar 2010:201). The archivist protects the record; however, such actions raise ethical concerns as highlighted below:

1. How ethical is the partial provision of access?
2. Is technology changing the profession?
3. Or is it creating an entirely new archivist?

Information ethics does not support the liberal attitude where there is no requirement to modify, improve or interfere with the natural course of things, but is fundamentally proactive (Floridi 2010:95). However, the global economy and the development of technology, specifically the ability to digitise records, have led to a paradigm shift in archival science, from storage and limited physical access to global digital access. In adhering to the code of ethics and the paradigm shift, archivists should promote the widest possible access and the continuing accessibility of records (International Council on Archives 1996). Most literature regarding archivists and technology focuses on technological issues and the management of digitisation projects, excluding the moral connotations (Anderson & Hart 2016:24).

Literature review

Investigating issues related to digitisation and ethics will involve the scrutiny of existing literature related to:

- ethics and the archival profession
- digitisation strategies, policies, and procedures.

After the review of the literature, the methodology, findings and discussion, conclusion and, lastly, the recommendations of the study will be deliberated.

Ethics and the archival profession

Ethics is a branch of moral philosophy and the main objectives of this article are to determine assumptions of digitisation of archival records. Ethical behaviour and conduct are at the centre of the archival profession and are fundamental to the authenticity of the record. As the International Council on Archives (2012) Code of Ethics states "a code of ethics for archivists should establish high standards of conduct…to the standards…professional responsibilities…"

The dialogue of information ethics in information science has tended to grow out of the discussion of the ethics of librarianship (Harris 1997:5). Archival ethics which is also part of information ethics involves the principles of equity in relation to the protection of the integrity of records during processing and use. According to Capurro (2014), information ethics explores and evaluates the development of morals and values as well as the development of ethical conflicts, amongst other aspects in the information field. Ethical issues arise from a consequence of action, including the reformatting of records. Liew and Cheetham (2016:1) state that "memory institutions are expected to hold high standards of intellectual integrity" and this includes representativeness, accuracy, trustworthiness and value user-contributed contents. These aspects give rise to various unique challenges. Ethics is complex in any context and the question of rights is constantly being shaped by technology in challenging ways (Harris 2006). In the context of record keeping and fluid technology, the ethical challenges include equitable access, protection of virtual records, maintaining records ownership and administration of records. In addition, Capurro (2014: np) states that:

> Ethics deals not only with the foundation of morality but also with its problematization. Many issues that arise from science and technology cannot be adequately dealt with on the basis of traditional customs and rules of fair play alone.

Archivists are traditionally guided by archival codes of ethics, as already mentioned. These codes are based on the deontological (expected professional action)

assumption that tasks should be carried out because it is the right thing to do and is applicable to similar situations (Jimerson 2010:345; Bastian 2014:106). Sturges (2009) emphasises that an ethical code guides members of the profession when faced with an ethical dilemma, whilst showing others that the profession does not leave its members devoid of good guidance. "The deontological approach emphasizes rights and duties but does not always take into account the consequences of moral actions" (Britz & Lor 2004). However, "in this approach, it is the features of the action itself that determine the moral rightness" (Bastian 2014:106). Ethical codes cannot cover every aspect of a profession. However, teleology (consequentialism) examines the results desired from the activity to determine the moral rightness (Jimerson 2010:346). In this context, the preferred result is that the digital copies are authentic, complete, safe and accessible. This would define whether the digitisation project was justified and the goals of the project were achieved. According to the International Center for Information Ethics, ethics for information specialists have educational goals to:

- be able to recognise and articulate ethical conflicts in the information field
- activate the sense of responsibility with regard to the consequences of individual and collective interactions in the information field
- provide basic knowledge about ethical theories and concepts and about their relevance in everyday information work (Capurro 2014).

The international and local archival associations have developed professional codes of ethics to influence, regulate and effect ethical archival practice. These codes of practice may vary in detail but they focus on core archival principles. "Archivists are encouraged, though not legally required, to recognize and respect such codes of ethics and practice" (Millar 2010). A code of ethics is a professional statement of standards used for governing the conduct of individuals within the profession. The International Council on Archives (2012) Code of Ethics states in principles 6 and 7:

Archivists should promote the widest possible access to archival materials and provide an impartial service to all users. Archivists should respect both access and privacy, and act within the boundaries of relevant legislation.

In addition to the International Council on Archives Code of Ethics, the South African Society of Archivists' Code of Archival Ethics (1993) states that an archivist should:

- provide optimum access to information… provided that the restrictions defined legally or by the creator… with the archivist are respected.
- keep a proper record of his/her archives and the work done on them to ensure that information is not lost…
- ensure that archives are equally accessible to all users and potential users

- preserve information about the past for the future.

However, the question arises as to whether the right of access and the fast development of technology provide the right to digitise (reformat) records. Neazor (2007:48) questions whether (with regard to the codes of archival ethics) "are the instruments of the past – even the recent past – adequate to meet the evolving demands of the future?" How does an archivist decide whether to adhere to the South African Code of Ethics, which is 24 years old, in times of the extremely swift development of technology? How does an archivist make sure that digitised records are not lost and provide equal access to online records for all users? Although the basic principle of the need to preserve access remains the same, codes need to be frequently evaluated and updated to be more applicable to current contexts. While archivists have to adhere to a code of ethics, they also need to align their actions to the values of the parent institution, which may be in conflict with the professional archivists' standards (Jimerson 2010:346). This creates moral dilemmas for the archivist. In addition, Bastian (2014:106) states that "records involve complex notions of control, power, and the use of evidence". Nevertheless, archivists need to understand that ethical codes are guides that do not offer specific solutions and do not guarantee ethical behaviour (Bastian 2014:117-118).

According to Anderson and Hart (2016:24):

> Despite being a relatively new field of research, digitisation of archival material has received a great deal of academic attention. The research can be divided into three broad groupings: technical research, which deals with the specifics of the hardware and software issues related to digitising artefacts; management research, which deals with the management of the digitisation process; and critical research, which tries to look beyond the surface issues…

To scrutinise archivists' actions and performance according to deontology this study uses ethical principles with reference to the ICA professional ethics code to identify ethical concerns when they digitise records. The code of professional archival ethics emanates from the core values of the profession. According to the Society of American Archivists (2016:np):

> The core values of archivists and the code of ethics for archivists [Society of American Archivists] are intended to be used together to guide archivists, as well as to inform those who work with archivists, in shaping expectations for professional engagement. The former is a statement of what archivists believe; the latter is a framework for archivists' behaviour.

Although archival ethics sets standards of conduct regarding the archives, Sturges (2009) states that codes can seldom provide everything that is needed to cope with the moral ambiguities that are the stuff of professional life. However, an archivist should have the knowledge, prudence and integrity sovereignty to:

- maintain the integrity of the records in their care and custody
- protect the authenticity of documents during archival processing
- promote access to archival material and provide an impartial service to all users (International Council on Archives 1996; Society of American Archivists 2016).

The code of ethics governs how duties of archivists and manuscript librarians are performed with reference to the selection, arrangement, preservation, and storage of records. Preservation incorporates all facets regarding the protection of records, including policies, staffing, storage, conservation, and reformatting. Archivists also provide access to reliable primary sources that provides evidence of the activities of individuals, organisations, and communities. This includes serving a wide range of users who seek to locate and use valuable evidence and information from this wealth of knowledge (Society of American Archivists 2016). The need for access impels the need to preserve the intellectual content and context of the records.

Archivists (as are other professions) are faced with moral quandaries. "With the growing recognition of this power of archives as institutions and archivists as power brokers who can limit or expand the accessibility of the records, comes social responsibility" (Jimerson 2010:345). Archivists and manuscript librarians need to make calculated and informed ethical considerations as well as adhere to their professional code of conduct to preserve, secure as well as provide access to historical records. Yet, the twenty-first century started off with an increasing number of archivists questioning archival ethics and searching for a comprehensive notion of what it meant to be an ethical archivist in an increasingly dynamic environment (Jimerson 2010:345). The principal standards of archivists to conduct their duties and make available primary resources that document tasks and activities performed, provide legal and administrative evidence, protect the rights of individuals and organisations, and form part of the cultural heritage of society (Society of American Archivists 2016). The preservation of records includes the preservation of authenticity over time and the processing of records according to principles and practices. There are various factors that affect such processes. Archives are sanctuaries of knowledge that are regarded with respect and authority and are protected and controlled by archivists whose principal responsibility is to protect the integrity of the record.

> The emphasis is that: The record …does not speak for itself. Society of which records creators, archivists and the users of archives are part – determines a record's meaning, significance, and value. Political, economic, cultural and other factors all play a role. Equally important, anyone searching for the meaning of a particular record must explore the contextual circumstances of its creation and use (Harris 1997:7). However, with the conversion of

> analogue (paper or graphic records) into electronic form (i.e. digitisation of records), the nature of the records shifts and in fact archivists and users may not know when digital records have been altered or changed (Hunter 2003:246).

The fact currently is that:

> For archives and records professionals in particular, the internet and its digital content create new ethical issues that are peculiar to that medium and that have as much to do with the owners of the technology as the owners of the content (Bastian 2014:124).

In order to prevent records from being altered and to prevent various ethical concerns, there is a need for careful planning and implementation of the project. Digitisation is not just about the act of scanning an analogue document into digital form, but also includes:

- document identification and selection
- document preparation (including preservation, access review and screening, locating, pulling, and refiling)
- basic descriptive and technical metadata collection sufficient to allow retrieval and management of the digital copies and to provide basic contextual information for the user
- safety of the material being digitised
- digital conversion
- quality control of digital copies and metadata
- providing public access to the material via online delivery
- reviewing the existing IT infrastructure to ensure that it can sustain long-term growth, storage, and preservation of digital copies and metadata
- utilising a management system that ensures the authenticity, reliability, usability, and integrity of the digital copies (The American National Archive 2014).

These processes can be divided into four main procedural stages, namely project planning for digitisation, processes occurring prior to digitisation, digital conversion and post-digitisation work (United Nations 2009).

Digitisation planning, policies and procedures

Digitisation is a time-consuming and expensive exercise to implement. It requires proper policy planning, the establishment of correct structures, as well as appropriate assessment of the risks involved. According to the United Nations

Educational, Scientific and Cultural Organization (2003) Charter on the preservation of digital heritage, Article 6, strategies and policies to preserve the digital heritage need to be developed, taking into account the level of urgency, local circumstances, available means, and future projections. The cooperation of holders of copyright and related rights, and other stakeholders, in setting common standards and compatibilities, and resource sharing, will facilitate this.

To achieve a successful digitisation project, an archive needs to establish a sustainable electronic management infrastructure by planning and developing proper digitisation policies. In addition, as part of the planning process of in-house digitisation projects, training requirements should be identified for staff, including the proper use of hardware/software, image formats, standards and procedures for quality control and varying work to avoid fatigue from repetition (United Nations 2011). Thurston (2012) points out "relatively few records professionals worldwide have had in-depth training and experience in managing and preserving digital records".

Apart from developing digitisation policies and training, a moral archivist has to provide long term access to digitised resources. Digitisation projects are regularly concerned only with the present, with little or no attention to the future and funding (Thurston 2012). According to the International Records Management Trust (2009:34), a trusted digital repository should be used to ensure that it:

- will maintain digital resources in a long-term and committed manner
- will meet or exceed standards for management, access, and security.

Digitisation helps with global access and preservation to a certain extent, but also has a number of challenges. The International Council on Archives (ICA) and IRMT (2016) state that although many organisations have experienced lost or inaccessible data, few stakeholders understand the critical importance of managing digital records effectively. They often assume that technology will 'solve' information problems when, in fact, technology often increases the challenge of accessing and preserving information over time.

To safeguard and ensure that the digitised records are trustworthy, archivists need to protect the context, content, and structure of the digitised records with the guidance of standards, as digitised records can be easily shared, combined and modified. Standards are required to control and capture good quality metadata to preserve, secure and access the digitised records. The ICA and the IRMT (2016) state that record-keeping metadata serves many important purposes, including

- identifying records
- authenticating records
- administering terms and conditions of access and disposal

- tracking and documenting the use(s) of records
- enabling access/location, retrieval, and delivery for authorised users
- restricting unauthorised use
- capturing in a fixed way the structural and contextual information needed to preserve the record's meaning.

The record-keeping standards of the United Nations (2009) emphasise that the value of a digitised record is dependent on the content, the quality of digital capturing and the security measures taken to protect it from tampering and information loss. Record-keeping systems and requirements are designed to ensure that records are protected according to the best practices available.

There are various types of metadata, namely descriptive, structural, administrative and contextual metadata that help manage and make records accessible. The quality and quantity of metadata attached to a record affects the ease of access of the record. The poorer the quality of the metadata, the harder it is to manage, locate, or retrieve the record. In order to collect appropriate metadata for access to records, the archival field has international and national standards to help collect consistent metadata for archival description. The South African National Standard (SANS) 23081-2:2010 for managing metadata for records is identical to the International Organization for Standardization (ISO) 23081-2:2009. Meehan (2014:83) states that the three categories of standards are as follows:

1. Data content standards, e.g. International Standard for Archival Description (General) (ISAD (G)), a Content Standard (DACS), Rules for Archival Description (RAD).
2. Data structure standards, e.g. Encoded Archival Description (EAD) and Machine-Readable Cataloguing (MARC).
3. Data value standards, e.g. Library of Congress Subject Headings (LCSH) and Art and Architecture Thesaurus (AAT).

However, it should be noted that standards for digital repositories are still in their infancy and are continuously being developed. However, "in many cases, international standards have not been introduced, and often planners don't know that they exist" (Thurston 2012).

According to ICA and IRMT (2009), entering complex metadata efficiently, accurately, and consistently can be costly, time-consuming and error-prone, leading to inaccuracies and inconsistencies. Manual capture of metadata can lead to variations, depending on the interpretations made by different people during the process. Vigilance is required to ensure that quality information is gathered.

However, the theory and practices of archival description continue to change with the increasing demand for online descriptions and content (Meehan 2014:87).

The malleability, longevity and constantly changing nature of digital records increase the complex ethical concerns regarding intellectual property rights, authenticity, technical quality, dissemination, capture, access, security, digital preservation and many others (Millar 2010:201; Bastian 2014:124). Ethical procedures also apply to the staff who implement the digitisation. Questions arise as to how they decide what to digitise and whether they are trained. Digitisation is not just about scanning a document, it involves the quality of the scan and "the standards and guidelines that exist to support the digitization process" (Millar 2010:200). However, an archivist needs to protect the authenticity of the record, content, and context. Digital enhancements make records easier to use, but ethically challenge the traditional meaning of authenticity (Manzuch 2017:9). In addition, the reliability/quality of the record is built on the notion that this is under the control of a trusted authority as well as a reliable and trusted depository (Moreno 2014:4). As well as:

> The archivist should not edit the digitized image in order to 'improve' its quality or usability. Enhancing digital images may make them easier to view, but such alterations diminish the fidelity of the images. A digital copy is not exactly the same as the original but it should be as faithful a reproduction as possible (Millar 2010:201).

Furthermore, the digitised record does not reflect all the attributes of the original analogue record. The ethical issues related to all conversion requirements are yet to be determined.

Apart from the challenges of metadata, the archivist needs to think about technical preservation approaches and should not leave these issues to be dealt with by the computer specialists alone. "Records are not simply aggregates of data or information, but forms of legal administrative, financial and historical evidence" that require opinions and archival skills (Jimerson 2010:321). The fluid and unstable technology leads to its constant development, which will affect access to digitised records as a consequence of technological obsolescence of hardware and software. In addition, "this includes the fact that there is a lack of standard hardware and software combined with the fast pace of technological obsolescence and there are many points in an electronic document's life where its integrity can be compromised" (Nsibirwa 2012:114). This could happen during digital conversion or years after the conversion. This is particularly relevant as records may require to be 'migrated' approximately every five years to ensure that they remain accessible. However, every time records are migrated they can lose various aspects, especially the structure and content. How does one ensure authenticity for the use of digitised records that do not have the same structures or features as the original?

Supplementary to authenticity, it is potentially damaging to archives because digitisation misleads users into relying on records found online and not by physically accessing the archive to search for other records that may be part of the collection (Millar 2010:199). Although digitisation affords access globally, in reality, many people still are affected by the digital divide in many developing countries, especially in Africa. The digital divide is characterised by a lack of telecommunications infrastructure, poor internet connectivity, high cost of data, lack of computers, smartphones as well as the knowledge to use the different technologies that can connect to the internet. Britz and Lor (2004:213) have a variety of moral concerns relating to digitisation of Africa's documentary heritage including:

> Will the people of Africa be fairly compensated for the use of their knowledge by others and what incentives will there be for them to make their body of knowledge available to the rest of the world?

Purpose and research questions

The main purpose of this article is to examine the ethical implications of digitisation of archival records in a special collection creating a new format of records. In addition, how decisions are taken and processes are organised in digitisation.

The following research questions were used to guide the study:

1. Are the right strategies, policies, and procedures in place to manage digitised archival records?
2. What ethical issues arise from digitisation of archival records?
3. What recommendations can be made based on the findings?

Research methodology

A pragmatic perspective was used to examine the ethical implications of digitisation of records using ethical statements from the ethical theories of deontology (expected professional action) and teleology (consequences of action). "Statements of archival ethics traditionally have emphasized deontological statements (what archivists should do)" (Jimerson 2010:345) as well as the teleological (consequentialism) aspects that regard the moral act as the product of the most desirable consequences. A mixed method approach using both quantitative and more predominantly qualitative methods was used to collect data to increase the validity of the results as the study focused on a segment of the APC collections. Although APC is classified as a special collection with artefacts and book collections, the researcher focused on the archival component of the institution and

only examined issues regarding digitised records. Data collection triangulation was applied to increase validity of results.

The population of the study was purposively selected and only three members of staff working on the digitisation project were interviewed. This was based on the fact that these members of staff had experience in digitising records. In addition, a sample of 114 digitised records were selected randomly and analysed using an observation checklist. The researcher used probability sampling to gain a true representation of the records digitised by 31 March 2017 uploaded on Digital Innovation of South Africa (DISA). Using a sample size calculator from SurveyMonkey 2016 of a total of 344 digitised records, a sample of 114 were selected with a confidence level of 80% and a margin of error of 5%. A systematic sampling method was then used with a sampling interval of three to ensure that the records had an independent chance of being included in the sample.

Data were collected using semi-structured interviews from participant one (P1) and participant two (P2), and an in-depth informal interview was conducted with participant three (P3). An observation checklist was used to solicit data from the online digitised records. A telephonic in-depth interview was used to collect data regarding the technical issues of digitisation from the IT personnel handling the digitised records; and face-to-face semi-structured interviews were used to collect data from two staff members regarding the correct strategies, policies and procedures in place to manage the digitisation process and digitised archival records, as well as their ethical implications. Once data from the initial interviews were analysed, follow-up telephonic interviews were conducted to fill in the gaps of information. The observation checklist was adapted from the United Nations Standard for record-keeping requirements for digitisation for post digitised work. The observation checklist was used to check the image quality and retrievability of records that have already been digitised. This included checking the images for:

- the legibility of the smallest detail captured
- completeness of the overall image
- retrievability of images
- metadata requirements completed properly – adequate documentation including the genre the record belonged to (United Nations 2009).

Data collected from the interviews and document analysis were triangulated.

Findings and discussion

The plan of action, including the decisions made as well as procedures and processes carried out, reveals the ethical connotations of this digitisation project.

Codes of archival ethics emphasise that deontological statements are used to measure what archivists should do. According to the Professional Code for South African Archivists (1993), the archivist must make an effort to "provide optimum access to information… provided that the restrictions defined legally or by the creator… with the archivist are respected". In order to evaluate what the archivists do with regard to policies, strategies, and procedures that are in place to manage digitised records as well as ethical issues that arise, three instruments were used to collect data. The semi-structured interviews were used to collect data regarding digitisation planning, policy, staff knowledge, training, equipment and digitisation processes.

The results of the semi-structured interviews are presented, together with the in-depth interview that was used to clarify processes and technical issues relating to digitisation. Then the findings from the observation checklist for digitised records are presented. Only significant findings are presented below.

Digitisation strategies, policies, and procedures

For most projects to be successful, planning is necessary for authentic, complete and accessible capture of archival records. This includes examining the ethical concerns by investigating the approach used for good record keeping and the architectural plan of implementation. The findings revealed that the digitisation project commenced in November 2016 and according to P1, permission was sought via email from Mrs Paton and granted to digitise the unpublished core collection. The decision to digitise the collections was made by the management of the parent institution as part of their strategic plan for the young, amalgamated institution. The reason being according to P1 was to "provide access and for preservation" of records. Yet, the findings (P1) also revealed no funds have been allocated to the project. How will the archive sustain the digitised records for future access? One of the reasons for the lack of funding could be a result of the APC staff not being involved in the planning and decisions-making regarding digitisation, together with the fact that there are currently no formal written policies for managing digital records. On the other hand, the South African Code of Ethics (1993) stipulates that "at all times the archivist must act within the parameters of the policy laid down by his/her employer". Nonetheless, "the archivist is obliged to utilize his/her professional expertise and experience to advise the employer to the best of his/her ability". One of the participant's (P1) response to the question as to whether the institution had any written policies for managing digital records stated that there was a "need for a unified policy for all special collections at UKZN".

Further dialogue with P1 revealed that a draft digitisation policy has been developed but has not yet been approved. Is it right to start a project without a policy in place? Guercio (2014:29) accentuates the need to have a digitisation policy in place and

states "it is not only a question of efficiency and risk mitigation: the presence of well-formed procedures and a definition of clear responsibilities… can be considered basic, unique and irreplaceable requirements for qualified, accurate and authentic digital resources" Lack of a digitisation policy affects the current and continued preservation of and access to these records as the project and staff lack clear direction.

P1 and P2 were also asked whether the institution had agreed on standards and guidelines for the long-term preservation of electronic records as digitisation is not just about scanning a record. Working ethically one needs standards and guidelines to support the digitisation process. Thurston (2012) identifies that "too often, the management and quality control framework needed to ensure that the digitized records meet requirements for legal admissibility, reliability, and authenticity, and long-term preservation have not been developed". P1 stated that they did not have any standards, but P2 stated they had standards within the parent organisation's IT policy. However, when probed further and asked about the location of this documentation, the interviewee (P2) referred to the "[Digital Innovation South Africa] DISA website". The parent institution is a partner of DISA and manages this digital library resource and this was confirmed by P3.

Staff knowledge and training

Staff were asked about the skills in the digitisation of records to establish whether they could appropriately and ethically manage and process the records. The findings revealed that P1 and P2 attended a two-day in-house basic training course which was conducted by the parent institution's IT personnel. This was confirmed by P3. The basic training included teaching the staff how to scan records as well as the input of descriptive metadata. P1 and P2 pointed out that the basic training was not adequate and that more training was required. Training would help address proper use of hardware and software, image formats, handling of records and standards and procedures for proper quality control checking (United Nations 2009:15). However, P2 stated that there was a need to network with others regarding digitisation and better equipment as the scanner was not able to scan newspapers. P2 stated that the scanner and computer were "all second-hand equipment". Also, the need for more staff was identified by both P1 – "we are understaffed, digitisation of a collection with two people is time-consuming" and P2 – "we cannot attend to other work", as they stated that digitising records is a time-consuming exercise.

Processes of digital conversion

Working ethically with archival records includes intellectual protection, including protecting the content as well as providing equitable access to these records (Bastian

2014:112). In addition, working ethically requires planning and includes where and how the archive stores the records. DISA hosts the content of the digitised records and it uses Dublin Core that uses 15 metadata elements for generic resource and cross-domain information resource description. Both P1 and P2 stated that P2 does all the scanning of records. P2 states "I scan using Corel photo paint 4, I optimise records and clean them then I convert them into PDF". P1 then completes the descriptive metadata and P3 makes the record accessible on DISA. United Nations (2009) points out that varying work to avoid mistakes is crucial, as mistakes are made from fatigue as a result of repetitive work. The Dublin Core elements help to describe the records in a simple way and make them accessible to all who are computer literate. Archival digital records are unique, unpublished records that require additional details based on the theory and practices of the archival field that differs significantly from the library profession. Archival records need significant information regarding the content, context and structure to prove integrity, authenticity and to preserve the record's meaning - this necessitates metadata in a variety of forms. For example, the ISAD (G) is a general standard that is used specifically for archival resource description that uses 26 metadata elements for use at different levels of an archival catalogue. Dublin Core uses 15 metadata elements that accommodate very ordinary descriptions. However:

> Most domain-specific metadata standards developed for resource discovery, including ISAD(G), …can be mapped to Simple Dublin Core. This makes it possible to maintain sets of more detailed domain specific descriptive data while federating searches across them (Higgins 2011).

Given the point above, the question arises as to whether a project that begun without a policy in place and basic training of staff would initiate the need for additional descriptions to be linked to the digital library. In spite of the need to advocate for easy location and access to records, there is a need to preserve the contextual relationships amongst them (Meehan 2014:94).

Post-digitisation

Digitisation is a repetitive and arduous job, and there is a need to have processes and procedures for working ethically for authentic, complete and accessible records (United Nations 2009; United Nations 2011). The observation checklist was used to examine the technical issues affecting the effective and efficient use of the digitised records. The checklist was also used to reveal any ethical concerns arising from the digitisation processes and the findings were quantified. The technical issues examined and collected from the online digitised records were as follows:

- The image quality – smallest detail legibly captured and completeness of the overall image. The findings show that the majority of the 114 records examined

(90%: 103) of the image of the record was good; only 2.7% (3) were found to be fair and six (5.3%) were poor. The six records that had poor image quality were very old records and in this case, the poor image quality reflects the fidelity of the images. Yet, the interview revealed that P2 cleaned the digitised records before saving them. Records were scanned using Corel Photo-Paint 4 to enhance records and then converted to PDF. Is it right for P2 to clean the images after scanning? It was the viewpoint of the participant that there is a need to provide access to a clear record; however, within the archival perspective, the context is partially lost.

- Retrievability of images, including completeness and correctness of metadata, details of the sample of 114 digitised records. The results indicated that all the sampled records were retrievable and the majority of the records were assigned the correct metadata. However, six (5.3%) records were found to have incorrect descriptive metadata and the majority of these records with errors had the wrong creators assigned to the record, thus affecting access to these records. What procedures were in place to check errors? The findings also revealed that some records were not fully accessible as a watermarks were used to protect the copyright of the record. Further probing revealed that after the commencement of the project, participants (P1 and P2) were informed that the use of the watermark was optional. Therefore, some records have a watermark and the majority do not.

The future of the digitised records is unclear and many questions remain unanswered. Working ethically with virtual records includes an array of digital preservation standards, maintenance of computer equipment as well as server space and making decisions about migration and storage (Bastian 2014:112). Will DISA involve staff in these actions? How will the staff at APC ensure the appropriate management of the preservation of the records together with access over time?

Conclusion and recommendations

The article outlines the ethical implications created by the absence of certain strategies, policies, and procedures to carry out digitisation of archival records. These gaps which the study identifies include:

- unclear legislation regarding the management of records of private archives
- outdated Copyright Act that does not include issues related to digitisation

- archaic code of professional ethics that is inadequate in terms of rapidly changing technology
- use of Dublin Core to describe archival records
- lack of a formalised digitisation policy and proper planning (exclusion of stakeholders in decision making) affecting funding, training and practical implementation of the project.

However, there is still a lack of praxis concerning ethical issues related to proper strategies, policies, and procedures required for a digitisation project for archival records. Thurston (2012) points out that:

> Meaningful citizen engagement in the digital environment requires on-going access to trustworthy, reliable and accurate records and datasets. If they are not professionally managed in secure technology-neutral facilities and supported by complete metadata, they are unlikely to be available to support citizens' needs.

Consequently, there is a need to amend the traditional codes of ethics to include issues surrounding new technology as the typical archivist is slowly being replaced by technology. A new kind of archive is developing and proper policies and strategies need to be developed, including all stakeholders to direct and sustain digitisation projects as well as the running of the new trustworthy archival repository. All these ethical issues have various challenges, but archivists are able to reflect on what has been done and identify the challenges in order to enhance the role of the archive for the future.

The study concludes that the proper management of a digitisation project is a complex task and recommends the following:

- The development of a code of ethics to incorporate principles related to technology and the reformatting of records such as digitisation for the benefit of the archival profession in South Africa.
- The provision of a visible and appropriate digitisation policy to direct the project. The draft policy needs to be put into place before further records are digitised.
- The development of guidelines and regulations to assist with digitisation strategy, processes and procedures.
- Consideration of differences between descriptive, administrative, structural and preservation methodologies in archives and libraries. International Standard for Archival Description (General) should be mapped to Dublin

Core to permit more detailed domain specific descriptive data to be captured.

- Promote collaboration with other institutions such as the University of Cape Town, University of Witwatersrand and others listed and registered under the National Research Foundation website - Digitisation and Data Preservation Centre that have planned digitisation projects for some of their archival collections.
- Lobbying for digitisation funding needs and skills training.

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